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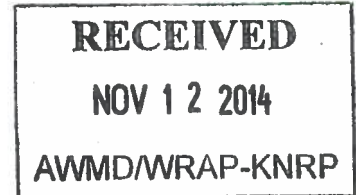
Robert Moser, MD, Secretary

Department of Health & Environment

Sam Brownback, Governor

November 4, 2014

Brenda B. Epperson  
Environmental Manager  
MRP Properties Company, LLC  
P.O. Box 696000  
San Antonio, TX 78269-6000



**RE: Comments on the Surface Water and Sediment Investigation Work Plan  
MRP Properties Company, LLC  
1400 South M Street, Arkansas City, Kansas  
RCRA ID# KSD087418695**

RCRA



534456

Dear Ms. Epperson,

The Kansas Department of Health and Environment (KDHE) and the Environmental Protection Agency (EPA) Region 7 reviewed MRP's document dated September 19, 2014, submitted by MWH Americas, Inc. on behalf of MRP Properties Company, LLC (MRP) for the Former Total Petroleum Refinery in Arkansas City. The Surface Water and Sediment Investigation Work Plan is required under Section III.H. of the Part II Permit. The work plan details the scope of work necessary to collect surface water and sediment data that will be used in the preparation of a baseline human health risk assessment and screening level ecological risk assessment. KDHE and EPA have the following comments:

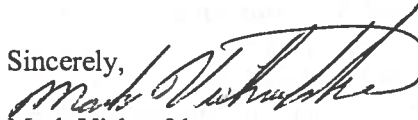
1. **Section 3.3 (p. 3-2).** Section 3.3 defines the specific prefixes to be used to designate composited sediment samples collected from the Walnut River, evaporation ponds and the stormwater pond but is unclear as to what prefixes will be used for discrete samples. Please clarify the protocol for labeling discrete sediment samples.
2. **Section 4.1 (p. 4-1).** The first paragraph in this section states that the total surface area for Evaporation Ponds 1, 2, and 3 and the Stormwater Pond are between 7,500 and 10,000 square feet. Please verify this statement.
3. **Section 4.1 (pp. 4-1 and 4-2).** This section indicates that if a pond or river surface water sample is judged very turbid, then a portion of the sample will be filtered for dissolved metal analysis. Please clarify that if a sample is judged to be very turbid then the sample will be analyzed for both total and dissolved metals. Dissolved metals concentrations are typically used in ecological risk assessments, while human health risk assessments generally rely on total metals.
4. **Section 4.2 (pp. 4-2 and 4-3) and Figure 4.** This section states that composite sediment samples shall be collected from all four ponds according to the guidelines for ponds 10,000 square feet and under contained in BER Policy #BER-RS-006. Please provide estimated surface area values for Evaporation Pond 1, Evaporation Pond 2, Evaporation Pond 3, and the Stormwater Pond to validate using the sampling guidelines for ponds less than 10,000 square feet. In addition, EPA requests that MRP collect the "Inlet" and "Outlet" samples as separate discrete samples instead of composited samples.
5. **Section 4.2 (p. 4-3).** On page 4-3 of Section 4.2, MRP describes locations and sampling procedures for sediment sampling on the Walnut River.
  - a. It is not clear to Region 7 ecological risk assessors how the sediment samples will be collected in the Walnut River. The first sentence states that five background samples will be collected, then one upstream and one downstream of the NPDES outfall. Then sentence five says each of the five samples will be

collected in shallow sediment. Also, the standard operating procedure for sediment sampling in Appendix A does not discuss "grab" samples of sediment. Please revise this section to discuss whether composite or discrete sampling will be used to collect each of the seven samples and how they will be collected (e.g., ponar grab, etc.). Discrete samples will be required for sediments collected for VOC analysis. Composite sampling of sediments for metals and other chemicals of concern, except VOCs, is best when the numbers of samples collected are so few.

- b. Five background sediment samples are planned for the Walnut River. Please note that this is not a sufficient number of samples to test for outliers or to statistically derive a background threshold value that could be used to form a background cleanup level. (Generally, at least ten samples are needed for this purpose.) In contrast, collection of two sediment samples is planned immediately upstream of the outfall and downstream of the site. EPA Region 7 human health risk assessors question the collection of five background samples, when only two potentially impacted river sediment samples are planned. Further, we are uncertain why the outfall sample would be collected immediately upstream, rather than downstream. Please consider how the background samples are intended to be used, the most appropriate sampling locations near the outfall, and whether additional impacted river sediment samples should be collected.
  - c. KDHE has reviewed the proposed sediment sampling locations for the Walnut River and requests that at least two additional sample locations be added to the sampling plan to better characterize present and historical site-related impacts to the Walnut River. The first proposed location would be in the old river channel north of present day monitoring well RFI2-2 and the second location would be in the river due east of monitoring well RFI2-4.
6. **Section 5.3 (p. 5-1).** This section describes headspace screening procedures for soil sampling. The section notes that subsamples of soil will be placed in Ziploc bags and allowed to sit at ambient temperature before being screened with a PID. This can be misleading since ambient temperatures can vary widely due to seasonal conditions. Ambient temperature should be further defined as a temperature of at least 70 degrees Fahrenheit.
7. **Section 5.4.4 (p. 5-3).** This section indicates that sediment samples with high clay content will not be homogenized due to difficulties mixing sub-samples. If a composite sediment sample cannot be homogenized, it will not represent a composite. If high clay conditions are noted in the field, EPA recommends collecting discrete grab samples (e.g., four from the pond floor surface, four from the pond floor subsurface, four from the pond sides, etc.) for all analyses.

Please respond to these comments by December 3, 2014 and submit revised pages as necessary. I would recommend a conference call between all parties to address any points of concern. If you have any questions, please contact me by phone at (785)-291-3760 or e-mail at ([mvishnefske@kdheks.gov](mailto:mvishnefske@kdheks.gov)). Brad Roberts (EPA) can be contacted at (913)-551-7279 or e-mail at ([roberts.bradley@epa.gov](mailto:roberts.bradley@epa.gov)).

Sincerely,



Mark Vishnefske

Environmental Scientist III

Hazardous Waste Corrective Action and Geology Unit

cc: Jay Mednick – MWH  
Brad Roberts – EPA Region VII - AWMD/WRAP  
Allison Herring – DEA/SCDO/Waste Programs  
Bill Bider – BWB